

# EUC800 Project Special Pressure Transmitter



## Description

The key raw materials, components and parts of the EUC800 differential pressure transmitter are all imported or joint venture production, and the whole machine has been strictly assembled and tested. The product has the characteristics of advanced design principles, complete varieties and specifications, and easy installation and use. Because the appearance of this model completely integrates the structural advantages of Rosemount 3051 and Yokogawa EJA, it gives users a refreshing feeling, and has strong versatility and substitution capabilities.

## Feature

Super performance, use to measure pressure, differential pressure and temperature..

Accuracy:  $\pm 0.1\%F.S/\pm 0.2\%F.S$

Stability:  $\leq 0.2\%$

Standard 4~20mA,RS-485 communication interface

Support upgrade of basic scene control technique

Little temperature effect

Little static effect

Overload can reach 2 times

## Application

Compatible with 316LSS,noncorrosive liquids.

Shipping and aviation industry.

Hydraulic pressure and pneumatic control system

Apply in Petroleum industry, chemical industry, electric power, metallurgy, hydrology etc process control.

## Range

Range code	Measuring range
4	0~37.4KPa
5	0~186.8KPa
6	0~690KPa
7	0~2068KPa

## Technical Data

Output	Analog output: two –wire 4-20mADC
	Digital output: two –wire 4-20mADC and superimposing variable digital signal accord with HART
Power supply	supply voltage 24VDC
Limit load	Max load resistor Rmax in loop decided by the supply voltage, see the below drawing. HART PROTOCOL require the load resistor not less than 250Ω,not more than 600Ω
Communication distance	Max. 1.5Km, multi-address communication can connect 15 smart transmitters Max.
Display	4 digital display,5 digit LCD display, pointer type.
Explosion-proof	ExialICT5;explosion suppression type
Zero offset	Can positive transfer or negative transfer, but can not overstep the utmost value
Temperature	ambient temperature -40-85℃(When choose LCD : -20-70℃)
Medium temperature	-40~104℃
Static pressure and single side overpressure	3.45KPa(absolute pressure)~31.2MPa (gauge pressure)
Relative humidity	5~98%RH
Run-up time	less than 5 sec.
Capability change	Less than 0.16cm3

Damp adjust	0.20~25 second
Malfunction alarming	If occur malfunction, automatism diagnose function will output 3.9 or 21.0mA
Configuration protection	To avoid the datas are modified random, can utilize software or protect switch lock the record data

### Performance Data

Reference condition	zero is the lower limit and not offset, temperature 25℃, Atmospheric pressure, 24VDC power, silicon oil , diaphragm 316L, data adjust range the same as the up and lower limit of the range.
Accuracy	$\pm 0.075 \sim \pm 0.2\%$
Stability	$\leq 0.2\% \text{URL/year}$
Tem. influence	$\pm (0.05\% \text{URL} + 0.15\% \text{FS} + 200\text{Pa}) 20^\circ\text{C}$
Static pressure influence	zero error 0.1URL/6.9Mpa; Zero error 0.1URL/1.7MPa
Vibration influence	withstand frequency 200Hz at any direction, arouse error $\pm 0.05\% \text{URL}$
Power influence	$< 0.005\%/V$
Load influence	no load influence
Mounting position influence	about 250Pa zero offset, can be eliminate via calibration, no range influence.
RF interference influence	drift is $\pm 0.1\%$ span in the condition of 30-1000MHz frequency and the most field intensity 10V/m

## Configuration parameter

wetted material	Diaphragm: 316LSS, Hastelloy , Monel or Tantalum Vent /drain valve:316LSS, Hastelloy , Monel or Tantalum Flange and joint : steel coated with cadmiumed ,galvanized steel, 316L SS, Hastelloy O-ring: Fluorin rubber
other material	Filled: silicon oil Bolt: galvanized steel Electric housing: low copper and aluminium alloy Cover O-ring: NBR Coating: polyester epoxy resin
Pressure port	Flange connection: 1/4-18NPT Joint pressure port: 1/2-14NPT
Electrical connection	Lead tube connection: M20X1.5、 1/2-14NPT
Weight	5kg (no include option parts )

Note:The model belongs to the project special pressure transmitter ,all data can be custom according to the customers requirements.

## Selection Guide

EUC800	Differential pressure transmitter				
	No.	Pressure range			
	4	0~37.4KPa			
	5	0~186.8KPa			
	6	0~690KPa			
	7	0~2068KPa			
		<table border="1"><tr><th>No.</th><th>Output</th></tr><tr><td>B</td><td>4-20mA with HART protocol</td></tr></table>	No.	Output	B
No.	Output				
B	4-20mA with HART protocol				

No.	Material structure			Filling liquid
	Pressure chamber	Bleed valve	Isolation diaphragm	
2 2	316LSST	316LSST	316LSST	Silicone oil
2 3	316LSST	316LSST	Hastelloy C-276	
2 4	316LSST	316LSST	Monel alloy	
2 5	316LSST	316LSST	Tantalum	
3 3	Hastelloy C	Hastelloy C	Hastelloy C-276	
3 5	Hastelloy C	Hastelloy C	Tantalum	
4 4	Monel alloy	Monel alloy	Monel alloy	
7 3	316LSST	Hastelloy C	Hastelloy C - 276	Fluorine oil
2 A	316LSST	316LSST	316LSST	
2 B	316LSST	316LSST	Hastelloy C - 276	
3 B	Hastelloy C	Hastelloy C	Hastelloy C - 276	
2 D	316LSST	316LSST	Tantalum	
3 D	Hastelloy C	Hastelloy C	Tantalum	
7 B	316LSST	Hastelloy C	Hastelloy C - 276	
		No. Item optional		
		T	1/2NPT (Female) 316 L SST	
		O	1/4NPT (Female) 316 L SST	
		No. Item optional		
		M7	Linear indicator 0~100	
		Bl	Pipe mounting curved bracket (D=51mm)	
		B2	Plate mounting bracket	